

Notice of Allowability

Application No.

10/813,161

Examiner

James D. Stein

Applicant(s)

CARR, CHARLES D.

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 05/15/06.
2. ☒ The allowed claim(s) is/are 1 and 3-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


John D. Lee
Primary Examiner


James D. Stein
Patent Examiner, AU 2874

DETAILED ACTION

This Office Action is responsive to the amendment filed on 05/15/06, which has been fully considered and entered. Claims 1, 3, 5, 9 and 10 have been amended. Claim 2 has been cancelled. Claims 1 and 3-10 are pending in the application.

Allowable Subject Matter

Claims 1 and 3-10 are allowed

With regard to claims 1, 3 and 4-9, none of the prior art of record discloses or suggests the optical alignment apparatus previously claimed, wherein the sliding and base plates include features being simultaneously chemically etched; wherein the base plate includes a slot for guiding said sliding plate, and an underside surface which includes first etched regions on either side of said slot, and wherein the sliding plate includes extended portions including transversely projecting tabs, upper surfaces of said tabs being in contact with said first etched regions. The etched regions discussed in the Deane reference are intended for mounting optical components, rather than for providing structural features that facilitate the motion of the sliding and rotating plates. It would not have been obvious at the time of the invention to one of ordinary skill in the art to modify the prior art to achieve these structural features, as applicant has discovered that these features improve alignment tolerances.

With regard to claim 10, none of the cited prior art discloses or suggests a method of aligning optical components, comprising; providing a base plate, and a sliding plate and a rotatable plate mountable on said base plate; said plates being prepared through an etching process, assembling said sliding plate and said rotatable plate to said base plate; attaching optical components to said sliding plate and said rotatable plate; attaching a linear stage to said sliding

Art Unit: 2874

plate for positioning thereof; aligning said optical components by positioning said sliding plate and said rotatable plate, and soldering said rotatable plate and said sliding plate to said base plate at heat isolation locations thereof. Bourcier does not teach etching. Since Bourcier is able to optically align optical components as desired, it would not have been obvious at the time of the invention to one of ordinary skill in the art to modify the prior art to achieve these structural features, as applicant has discovered that these features improve alignment tolerances.

Conclusion

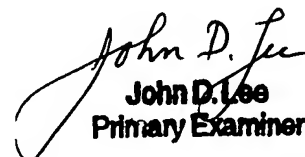
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Stein whose telephone number is (571) 272-2132. The examiner can normally be reached on M-F (8:00am-4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James D. Stein


John D. Lee
Primary Examiner